

Graham, Benita

From: Edward Wiener <Edward.Wiener@phila.gov>
Sent: Thursday, August 25, 2016 12:16 PM
To: wentworth, paul
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED
Attachments: 1501 PES RefineryTier3 Project - SOB 15253 - Mod 8.25.2016.docx

Paul,

I confirmed that none of the numbers in the calculations changed. The version in Chuck's 7/15 e-mail also appears to address the significant applicability issues, such as NSPS non-applicability for the re-located heater.

FYI, attached is an updated SOB.

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From: wentworth, paul [wentworth.paul@epa.gov]
Sent: Wednesday, August 24, 2016 4:43 PM
To: Edward Wiener
Subject: FW: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Hi Wed: Has any of these changes affected the original application and the NSR applicability determination or is the latest application revision ok?

From: BARKSDALE JR, CHARLES D [mailto:CHARLES.BARKSDALE@pes-companies.com]
Sent: Wednesday, August 24, 2016 2:36 PM
To: Edward Wiener <Edward.Wiener@phila.gov>
Cc: wentworth, paul <wentworth.paul@epa.gov>; Campbell, Dave <campbell.dave@epa.gov>; CARACAPPA, DAVID A <DAVID.CARACAPPA@pes-companies.com>; Andrew Woerner <Andrew.Woerner@erm.com>; Colin McGroarty <Colin.McGroarty@erm.com>
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Ed,

Looks good. We have no other comments.

Thanks again,
Chuck

Chuck Barksdale
Site Environmental Director
Philadelphia Energy Solutions Refining and Marketing LLC
215-339-2074 (office)
610-299-6260 (cell)
866-302-2146 (fax)

From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]

Sent: Wednesday, August 24, 2016 8:37 AM

To: BARKSDALE JR, CHARLES D

Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty

Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Chuck, thanks.

Everyone, attached is the latest. If there are any comments, please let me know.

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From: BARKSDALE JR, CHARLES D [CHARLES.BARKSDALE@pes-companies.com]

Sent: Monday, August 22, 2016 5:10 PM

To: Edward Wiener

Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty

Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Ed,

This looks good except for two minor typos:

Permittee is misspelled for Condition 29 (a).

Condition 30(d) should be: "For the 1332 H-2 and H-3 Heaters, monthly records to demonstrate compliance with Conditions 12 and 13" rather than Conditions 10 and 11.

Thanks,
Chuck

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From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]

Sent: Monday, August 22, 2016 11:32 AM

To: BARKSDALE JR, CHARLES D

Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty

Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Attached is the latest version. Please let me know if there are any more comments.

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From: BARKSDALE JR, CHARLES D [CHARLES.BARKSDALE@pes-companies.com]
Sent: Friday, August 19, 2016 2:30 PM
To: Edward Wiener
Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Ed,

We agree with your latest edits based on Paul's comments but one edit was missed so we've corrected it on the attached permit. See 5 (e).

In addition, for the H2S limit for the heaters, we agree that including them for the 870 heaters is unnecessary so we are proposing to delete them. This removal required revision to the following conditions:

- o Condition 25 to update the reference to 11(c)
- o Condition 30(c) to update the reference to 11(c)

We also found a few other minor items:

- Condition 1, third bullet – should read “adding firing limits” rather than “adding throughput limits”
- Condition 9 – somehow the 870 firing limits got lost for the H-1 heater. Conditions (d) and (e) have been put back in.
- Condition 30(g) – This is referring to the projected actual discussion in Condition 15 (not 13).

We believe these are all minor edits and this permit should be ready to be issued. Let me know if you have any questions or need anything else.

Thanks Ed and everyone else for your help on this permit.

Chuck

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From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]
Sent: Thursday, August 18, 2016 4:55 PM
To: BARKSDALE JR, CHARLES D
Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Slightly modified version. Paul noticed that we had some of the rolling 365-day MMBTU throughput limits listed as "MMBTU/hr", which I corrected. I also made the wording consistent, "MMBtu per rolling 365-day period", for all of them.

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From: Edward Wiener
Sent: Tuesday, August 16, 2016 4:30 PM
To: BARKSDALE JR, CHARLES D
Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Chuck,

Attached is the latest draft. I appear to have made the previous version based on the latest draft e-mailed by you, not the one e-mailed by David. The additional comments are fine. You are correct on the NSPS issue for relocated units.

While revising the review memo, I discovered I don't have a good handle on the H2S requirements. Why is the 162 ppm H2S limit being listed for the 870 Heaters? That language actually comes from Ja, although it leaves out the rolling 365-day limit. Condition #16 has the J requirements for all heaters. If 162 ppm is generally equivalent to the limit in #16, I would still just go with #16 as it is the language from the regulation,. It also doesn't have the 3-hour average mentioned in #9-#11.

I modified Condition #29 to be more clear that all heaters need a H2S monitor and recorder for fuel gas. I added the requirement to install a new one for the 870 heaters in a new #29(a). I also added the Phase I application requirement and referenced Revision 7 of the PA CSMM so there is no confusion on the Revision.

I kept the simultaneous NOx and CO stack test requirement in Condition #25, which you removed when you removed the Ja requirements.

Everyone, please let me know if you have any comments.

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From: BARKSDALE JR, CHARLES D [CHARLES.BARKSDALE@pes-companies.com]
Sent: Wednesday, August 10, 2016 5:39 PM
To: Edward Wiener
Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty
Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Ed,

Thanks for the update. I think we are close to a final permit. Based on our review, you did not include some comments and updates that Dave Caracappa sent in on my behalf on July 22, so we are resubmitting them here and included them as edits to your August 4 draft. We have also included some comments to what you provided below in red text.

Dave's July 22 email contained two main issues (in italics) that I want to restate here that are also addressed in the attached revised permit:

1. *We added Conditions 9, 10, 24, and 30(b) to cover the 870 H-1 and H-2 heaters. We included NOx and VOC emission limits and testing requirements similar to the 1332 Heaters. (Also see our comments in red below to your last comment.)*
2. *A sentence was added to the beginning of Conditions 5, 6, 7, 8, 9, 10, 12, and 13 noting that the limits will not go into effect until the modifications (as defined elsewhere in the Plan Approval) are complete and the unit has commenced operation in the Tier 3 configuration.*

In addition, we continue to believe that what we provided in my July 15 email about 870 H-3 heater is correct and that it should not be subject to NSPS Ja requirements. Here's an excerpt of why from the application:

New Unit 870 H-3 Heater

The new Unit 870 H-3 Heater will be comprised of an idle heater from the former Sunoco Inc. (R&M) Eagle Point Refinery. Subpart Ja is applicable to new or modified sources in petroleum refineries including: fluid catalytic cracking units (FCCU), fluid coking units (FCU), delayed coking units, fuel gas combustion devices, flares and sulfur recovery plants. The idle Unit 870 H-3 Heater from the former Sunoco Inc. (R&M) Eagle Point Refinery was subject to NSPS Subpart J at the commencement of operation (prior to the May 14, 2007 NSPS Subpart Ja applicability date) and continued to be subject to Subpart J at the time when the Eagle Point Refinery was idled in the fourth quarter 2009.

Unlike the PSD and NANSR programs, reactivation of an idle source is not considered construction of a new source^s. The Unit 870 H-3 Heater would only be subject to NSPS if the source has been modified or reconstructed, where 40 CFR 60.2 defines modification as...

“any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.”

The proposed changes to the Unit 870 LSG Unit do not require physical changes or a change in the method of operation to the Unit 870 H-3 Heater which increases the amount of any pollutant to which a standard applies. Therefore, the Unit 870 H-3 Heater is considered subject to Subpart J and is not considered a modified source and therefore, not subject to Subpart Ja.

Let me know if you have any questions or want to have a meeting.

Thanks,
Chuck

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From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]

Sent: Thursday, August 04, 2016 4:12 PM

To: BARKSDALE JR, CHARLES D

Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty

Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Attached is the latest draft. It's fairly similar to the last PES draft. A few differences are noted below. I may be forgetting something.

- The new throughput limits for the 864 heaters aren't in RACT, so I change the description from RACT limits to throughput limits on the first page. **OK**

- In #5-11, some limits that aren't in the RACT plan approval are described as coming from RACT. Some limits for existing heaters that are getting LNBs are described as BAT, which doesn't technically apply to existing units that aren't increasing emissions. I changed the citations for all of these to the application. **OK**

- I changed the wording in the notes part for rolling 12-month limits to remove "initial" and state that compliance shall be based on AMS-approved stack tests. **OK**

- The 864 PH-7 and 870 H3 heaters have additional hourly CO limits that appear to be the annual limit divided by 8760. I don't remember why we had these for these particular heaters. I'm not sure the separate hourly limits are needed since we will have stack test data to combine with fuel usage data to determine compliance with the rolling 12-month limits. I suppose there is some argument to have a lbs/hr or lbs/MMBTU limit for the new heater. **We recommend deleting the hourly CO limits. This is reflected in our attached mark-up.**

- Any limits based on calculations in the application were made "shall not exceed" instead of "less than". **OK**

- In #22 I added some of the NSPS requirements for heaters below 100 MMBTU/hr that use the alternative to a NOx CEM, such as biennial tests and O2 monitoring. I'm requiring simultaneous CO tests along with the NOx tests to make sure that nothing done for NOx emissions causes CO compliance issues. **As noted in my July 15th email and on page 35 of the revised Plan Approval application (and included above), this heater is only subject to Subpart J. Therefore, the oxygen monitoring requirements do not apply.**

- In #27(a)-(c), I removed the alternative options to stack tests since the heaters will all have stack tests for these limits. I can add language to cover the period between start-up and the initial if necessary. **OK**

The application uses stack test data instead of the 0.035 lbs/MMBTU NOx emission limits for the 870 H-1 and H-2 Heater PAEs. Either the application calculations need to be modified or we need to add the PAEs as limits in the plan approval. It is correct to use the stack test data for the baselines, assuming it follows the emission inventory for those years.. **– In our latest version of the Draft 15253 Plan Approval attached to the July 22nd email, we included the 0.035 lb/MMBtu short term NOx limit and the rolling 12 month NOx limit (TPY) based on the stack test values (0.029 lb/MMBtu [H-1] and 0.028 lb/MMBtu [H-2]). Please also see the additions of Conditions 9 and 10 in the 7-22-16 version of the Draft 15253 Plan Approval and addressed in the e-mail sent 7/22/2016 (E-mail text and 7-22-2016 DRAFT Plan Approval attached). The attached mark-up also includes these changes.**

Please let me know if anyone has any comments.

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From: BARKSDALE JR, CHARLES D [CHARLES.BARKSDALE@pes-companies.com]

Sent: Friday, July 15, 2016 1:58 PM

To: Edward Wiener

Cc: wentworth, paul; Campbell, Dave; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty

Subject: RE: Conference Call on PES Tier 3 Permit Application - REVISED APPLICATION ATTACHED

Ed,

Thanks for starting your review. Included below are responses and comments to your initial thoughts. In some cases, we have modified the application or draft permit (both attached) to clarify or provide additional information.

As you know, we are hoping to do much of the work on this project this fall as part of meeting the January 1, 2017 Tier 3 deadline so we would appreciate that this be given priority for review. We are prepared to meet by phone or in person if necessary.

Let me know if you have any questions or need anything else.

Thanks,
Chuck

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From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]

Sent: Wednesday, July 13, 2016 11:30 AM

To: BARKSDALE JR, CHARLES D; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty; Campbell, Dave; wentworth, paul

Subject: RE: Conference Call on PES Tier 3 Permit Application

I haven't modified the draft plan approval yet, but here are my thoughts so far:

- The new MMBTU/hr limits for the 864 heaters are described as RACT limits but aren't actually in your RACT plan approval, so we shouldn't cite RACT in this plan approval. They are also below maximum capacity and 8760 hrs/yr, which I assume is intentional and is not a problem. Please specifically request the limits in the application and I will cite the application.

We agree that they are not RACT limits. We have moved these annual firing rate limits to be limits requested by the application. See the new Section 7 of the plan approval application.

- You are now bringing in an 91.0 MMBTU/hr heater from Eagle Point instead of a 70.0 MMBTU/hr heater. I assume you are bringing a different heater.

This is the same heater, just now planned to be fired at its full capacity. Since we did not need as much firing for the heater at 864, we limited the firing to 70 MMBTU/hr. This heater is similar to the existing 870 H-1 heater so it should not have difficulty firing at the higher 91 MMBTU/hr limit.

- The NOx limit for the 864 PH-1 Heater is listed in both 6(a) and 6(e), with different compliance methods. This was carried over from our draft. I'm will delete 6(e), but add something about the quarterly portable analyzer testing to 6(a), since that is still a RACT plan approval requirement. With the new presumptive RACT stack testing requirements, you can probably have the quarterly portable analyzer sampling removed from your RACT plan approval, although you will have to go through the RACT process to do it.

We would choose to not include the RACT compliance requirements in this Plan Approval and only opt to include the associated firing or emissions limits to avoid confusion with future RACT Proposals. In this latest draft the RACT compliance demonstrations have been removed, but the RACT citation remains.

- 10(d) - The new 0.031 lbs/MMBTU NOx limit for the 1332 H-2 Heater is actually lower than the current RACT limit (0.040 lbs/MMBTU). Please make sure it is requested in the application and we will cite the application. We will add a stack test requirement.

PES has modified the emissions calculations and the draft 15253 Plan Approval to keep the 0.04 lb/MMBtu emission limit.

- 27 - I'm going to modify some of the monitoring conditions to be clear that compliance with annual limits must be based on stack test data, when available. With the exception of a couple of VOC limits for 1332 heaters, they all appear to have stack tests requirements now.

We have added some conditions to paragraph (c).

- We can delete the 870 H-3 Heater NOx CEM requirement, but will have to add the NSPS alternative testing and O2 monitoring requirements for heaters below 100 MMBTU/hr.

See the revised Section 6.3.1 in the plan approval application. This section discusses the applicability of NSPS Subpart J rather than NSPS Subpart Ja. Therefore, the oxygen monitoring requirements do not apply.

- So far I haven't found any issues with the new emission calculations. For clarity, I would add a brief footnote about GHG PSD applicability to the PSD table, in addition to what you have in the main body of the application.

Footnote added to the Table 4-1 in the plan approval application.

Please let me know if you have any comments.

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From: BARKSDALE JR, CHARLES D [CHARLES.BARKSDALE@pes-companies.com]

Sent: Tuesday, July 05, 2016 9:44 AM

To: Edward Wiener; CARACAPPA, DAVID A; Andrew Woerner; Colin McGroarty; Campbell, Dave; wentworth, paul

Subject: RE: Conference Call on PES Tier 3 Permit Application

In preparation for today's call, attached is an updated draft Tier 3 Permit and associated backup emissions. This draft is marked up against the most recent version we received from AMS. As we will discuss the following are key elements of the change:

1. We have proposed rolling annual NOx and firing rate limits at the two 1332 Unit heaters at RACT (maximum potential).
2. The Tier 3 design has changed somewhat and impacted all the units. In general, the scope is less. Here are key changes:
 - a. Many of the proposed changes at 864 Unit have been eliminated causing the annual firing rate needs at 864 to decrease
 - i. We have proposed rolling average NOx and firing rate limits that reflect this reduced firing rate needs (daily RACT limits remain the same)
 - ii. The PH-7 heater will remain with new Low NOx burners (The planned PH-13 heater has been removed from the scope.)
 - b. The firing rate needs at 870 Unit have changed
 - i. The new heater will now be the slightly lower firing former Eagle Point heater originally planned to be installed at 864 Unit. This means reduced emissions at 870 Unit.

- c. The stream from the 1332 Unit originally planned to be sent to the 864 Unit will now be sent as feed to the debutanizer of the 1232 Unit recovery section on an as needed basis to meet Tier 3 gasoline sulfur requirements.
3. Overall NOx and VOC emissions are similar as in the prior permit

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From: Edward Wiener [<mailto:Edward.Wiener@phila.gov>]
Sent: Wednesday, June 15, 2016 2:47 PM
To: CARACAPPA, DAVID A; BARKSDALE JR, CHARLES D; Andrew Woerner; Colin McGroarty; Campbell, Dave; wentworth, paul
Subject: RE: Conference Call on PES Tier 3 Permit Application

Are there any topics that anyone would like to cover besides the limits for the 1332 Heaters in the Tier 3 plan approval?

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From: CARACAPPA, DAVID A [DAVID.CARACAPPA@pes-companies.com]
Sent: Thursday, June 09, 2016 8:03 AM
Required: CARACAPPA, DAVID A; BARKSDALE JR, CHARLES D; Andrew Woerner; Colin McGroarty; Edward Wiener; Campbell, Dave; wentworth, paul
Subject: Conference Call on PES Tier 3 Permit Application
When: Thursday, June 16, 2016 10:00 AM-11:00 AM.
Where: Conference call

To all:

Let's meet at this day/time in order to discuss the PES Tier 3 Permit Application. Conference call information is below.

Call-in number: 866-837-9640
Passcode: 215 339 2634

Thank you

Dave

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